

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 40. (Canceled)

41. (New) A method for communicating between a mobile station and a radio resource entity of a telecommunication system via an uplink temporary block flow (TBF) connection on a packet data channel of a General Packet Radio Service (GPRS) between the mobile station and the radio resource entity, said method comprising:

transmitting radio link control (RLC) data blocks from the mobile station to the radio resource entity during a first active data transfer period using the uplink TBF connection; and

maintaining the uplink TBF connection during a passive period that follows the first active data transfer period, wherein during the passive period the mobile station does not send RLC data blocks to the radio resource entity.

42. (New) The method of claim 41, further comprising exchanging information between the mobile station and the radio resource entity to cause the mobile station to operate in a mode under which an uplink TBF connection is maintained during a passive period.

43. (New) The method of claim 42, further comprising creating a control connection between the mobile station and the radio resource entity, wherein said information is transferred over the control connection.

44. (New) The method of claim 41, further comprising:

receiving uplink transfer permission from the radio resource entity at the mobile station during the passive period;

upon having one or more RLC data blocks ready for transmission during the passive period and having uplink transmission permission, transmitting the one or more RLC data blocks to the radio resource entity during a second active data transfer period that follows the passive period.

45. (New) The method of claim 41, further comprising sending Packet Dummy Control Blocks from the mobile station to the radio resource entity over the uplink TBF during the passive period.

46. (New) The method of claim 41, further comprising sending a signaling message from the mobile station to the radio resource entity during the passive period indicating the mobile station does not have any RLC data blocks to send at the time.

47. (New) A mobile station for communicating with a radio resource entity of a telecommunication system via an uplink temporary block flow (TBF) connection on a packet data channel of a General Packet Radio Service (GPRS) between the mobile station and the radio resource entity, the mobile station comprising:

- a transceiver to transmit wireless communications to and receive wireless communications from radio resource entities of the telecommunication system via data channels and control channels associated with such communications;

- a controller to control transmission of radio link control (RLC) data blocks to the radio resource entity via the transceiver during a first active data transfer period using the uplink TBF connection and to maintain the uplink TBF connection during a passive period that follows the first active data transfer period, wherein during the passive period the mobile station does not send RLC data blocks to the radio resource entity.

48. (New) The mobile station of claim 47, wherein the transceiver receives uplink transfer permission from the radio resource entity during the passive period, and, upon having one or more RLC data blocks ready for transmission during the passive period and having uplink transmission permission, transmits the one or more RLC data blocks to the radio resource entity during a second active data transfer period that follows the passive period.

49. (New) The mobile station of claim 47, wherein the controller is further configured to exchange information with the radio resource entity via the transceiver using at least one data channel or control channel to cause the mobile station to operate in a mode under which the uplink TBF connection is maintained during a passive period.

50. (New) The mobile station of claim 49, wherein said controller is further configured to set up a control channel with the radio resource entity, and wherein said information is transferred over the control channel.

51. (New) The mobile station of claim 47, wherein the controller is further configured to send Packet Dummy Control Blocks via the transceiver to the radio resource entity over the uplink TBF during the passive period.

52. (New) The mobile station of claim 47, wherein the controller is further configured to send a signaling message via the transceiver to the radio resource entity during the passive period indicating the mobile station does not have any RLC data blocks to send at the time.

53. (New) A radio resource entity of a telecommunication system for communicating with a mobile station via a connection on a General Packet Radio Service (GPRS), the radio resource entity configured to:

receive radio link control (RLC) data blocks from the mobile station during a first active data transfer period using an uplink temporary block flow (TBF) connection on a packet data channel between the mobile station and the radio resource entity; and

maintain the uplink TBF connection during a passive period that follows the first active data transfer period, wherein the passive period occurs when the mobile station does not send RLC data blocks to the radio resource entity.

54. (New) The radio resource entity of claim 53, further configured to exchange information with the mobile station using at least one data channel or control channel to cause the mobile station to operate in a mode under which the uplink TBF connection is maintained during a passive period.

55. (New) The radio resource entity of claim 53, further configured to transmit uplink transfer permission to the mobile station during a passive period.

56. (New) The radio resource entity of claim 53, further configured to:

allocate a first connection on a packet data channel to a first mobile station;

receive data from the first mobile station over the first connection during an active data transfer period;

determine that a passive period exists on the first connection during which the first connection is inactive;

allocating a second connection on the packet data channel to a second mobile station;

receiving data from the second mobile station via the second connection while maintaining the first connection during the passive period.

57. (New) The radio resource entity of claim 56, further configured to reallocate the second connection to another packet data channel in response to the first connection becoming active again.

58. (New) The radio resource entity of claim 53, wherein when allocating data transfer resources for a first direction of packet data transfer, resources are also allocated for packet data transfer of the opposite data transfer direction.

59. (New) A mobile station for communicating with a radio resource entity of a telecommunication system via an uplink temporary block flow (TBF) connection on a packet data channel of a General Packet Radio Service (GPRS) between the mobile station and the radio resource entity, the mobile station comprising:

an antenna;

a transceiver including an RF transmitter and RF receiver operatively coupled to the antenna to transmit RF communications to and receive RF communications from radio resource entities of the telecommunication system via data channels and control channels associated with such communications;

a controller, operatively coupled to the RF transmitter and RF receiver; and

memory, having machine-readable instructions stored therein, configured to be executed by the controller to cause the mobile station to perform operations including,

transmitting radio link control (RLC) data blocks to the radio resource entity during a first active data transfer period using the uplink TBF connection and maintaining the uplink TBF connection during a passive period that follows the first active data transfer period,

wherein during the passive period the mobile station does not send RLC data blocks to the radio resource entity.

60. (New) The mobile station of claim 59, wherein execution of the instructions performs further operations including receiving uplink transfer permission from the radio resource entity during the passive period, and, upon having one or more RLC data blocks ready for transmission during the passive period and having uplink transmission permission, transmitting the one or more RLC data blocks to the radio resource entity during a second active data transfer period that follows the passive period.

61. (New) The mobile station of claim 59, wherein execution of the instructions performs further operations comprising exchanging information with the radio resource entity via the transceiver using at least one data channel or control channel to cause the mobile station to operate in a mode under which the uplink TBF connection is maintained during a passive period.

62. (New) The mobile station of claim 61, wherein execution of the instructions performs further operations comprising setting up a control channel with the radio resource entity, and transferring said information over the control channel.

63. (New) The mobile station of claim 59, wherein execution of the instructions performs further operations comprising sending Packet Dummy Control Blocks to the radio resource entity over the uplink TBF during the passive period.

64. (New) The mobile station of claim 59, wherein execution of the instructions performs further operations comprising sending a signaling message via the transceiver to the radio resource entity during the passive period indicating the mobile station does not have any RLC data blocks to send at the time.